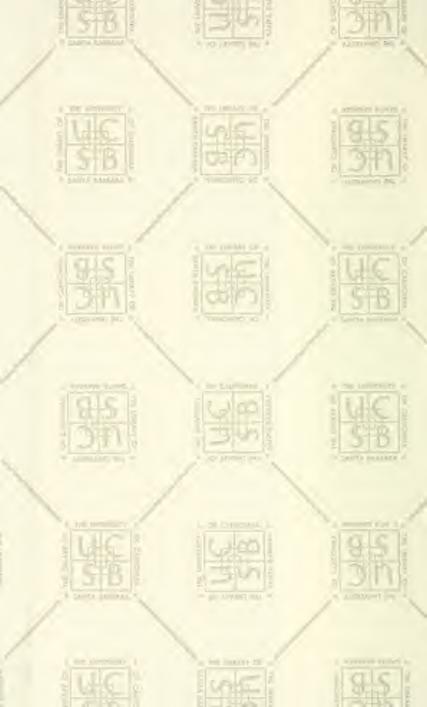
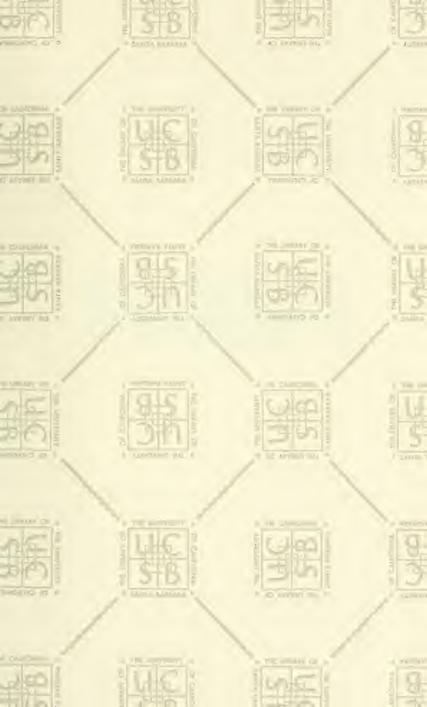


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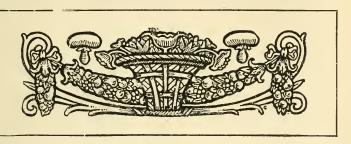






M A C F A D D E N'S PHYSICAL TRAINING

AN ILLUSTRATED SYSTEM OF EXERCISE FOR THE DEVELOPMENT OF HEALTH, STRENGTH AND BEAUTY



___B Y ===

BERNARR A. MACFADDEN

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"BEAUTY SHOULD BE THE DOWRY OF EVERY MAN AND WOMAN AS INVARIABLY AS SENSATION." * HEALTH, OR FINE ORGANIZATION SHOULD BE UNIVERSAL. — EMERSON.





Yours for health Bernarr Magladden





Photographed by Sarony, 1894. The Author Posed after the Painting "The Youth of Samson."

"Is there anything better in a state than that both men and women be rendered the very best?"—Plato.

"Physical training is merely the proper use of the entire muscular organism. To use several muscles properly while others are left inactive to weaken and decay, is not intelligent training. Again, the object of true physical training is not the development of muscular power solely—it is the strengthening of the entire assimilative and vital system. One who practices it persistently and intelligently, finds not only that his muscular power is greater, but that his health is better, his eyes clearer, the skin improved in color, the digestion stronger, and the mind buoyed with a confidence which comes only with a high state of physical vigor."—The Author in New York World, May 10, 1894.



Classical Pose of the Author.

Photographed by Guerin, 1893.

"It is by virtue of a triple mode of organic activities that man reveals the immanent power of his being."—Delsarte.

"Strength, health, manly and womanly beauty and vigor—the very foundation upon which are built all happiness, all success, and all that makes life productive of glorious results—is attainable for all. What a grand possession it is! Life without it is a humdrum existence. No intense pleasures, no strong emotions, no fiery ambitions, come to those who have not this 'good and perfect gift.' It is the very 'sauce' to existence. It is the 'fire' which incites to efforts that lead beyond mediocrity in this race of life. You who have it not try for it now! You who have children growing up into manhood and womanhood remember your imperative duty and make them, in the true sense, MEN and WOMEN."—The Author in "Health Culture."



Classical Pose of the Author.

Photographed by Sarony, 1900

"Who will say that the cultivation of physical vigor does not elevate and broaden humanity both mentally and physically? It annuls the influence of petty 'nothings'; it clears the brain; it thrills one with joy, with happiness. Under its natural, exhilarating effects, the blues disappear mysteriously, the cross and crabbed dyspeptic loses his illtemper and surprises his family with his kindness and good nature. Murky dissenters and chronic growlers just taste of life from this standpoint! Clear your system of accumulated corruption from inactivity, and live! Yes, live, in the true sense of the word. Feel the inspiring, almost heavenly rewards of following the great laws of health. Then can one taste the sweets of this life—then, and then only, can one enter that realm of happiness revealed in happy dreams.

"Man, you are indeed wonderfully made! glorious happiness is within your reach! Grasp it before your eyes grow dim, your feet unsteady! Before the call, bearing you into a mysterious uncertainty, roughly ends life's dream."-From "The

Athlete's Conquest."



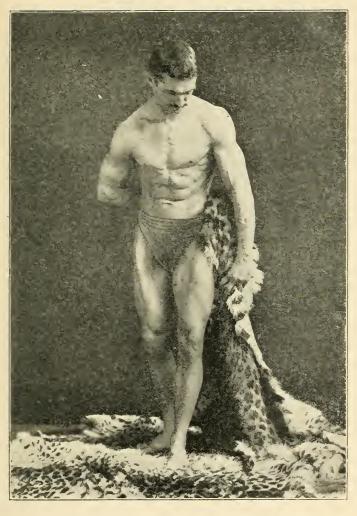
The Author Posed as "The Boxer," Vatican, Rome.

Photographed by Sarony, 1394.

"What a piece of work is man! How noble in reason! How infinite in faculties! In form and moving, how express and admirable! In action, how like an angel! In apprehension, how like a god! The beauty of the world! The paragon of animals!"—Shakespeare.

The strength, grace and suppleness, symmetrical outlines and exquisite curves occasionally perceived in a beautiful human body, thrill the cultured mind with something akin to awe and wonder. And yet no human being ever acquired handsome proportions without some measure of physical training—knowingly or unknowingly practiced. Nature's laws are immutable. An inactive muscle becomes in time a shapeless, flaccid mass of torpid flesh. Activity—use—of the muscular system is absolutely essential to the attainment of symmetry and beauty, as well as health and strength.

The office man, the brain worker, to acquire or retain vigor of body and clearness of mind, must have physical training. In the profusely illustrated system which follows, every muscle of the vast and complicated organism is exercised, if directions are closely followed, thus avoiding any possible chance of producing a one-sided development. The real secret of rational physical training is this use of every muscle. The wood-sawyer is strong, but he is a child in the hands of a properly trained athlete. We have the results of ordinary exercise in the wood-sawyer, and the results of scientific physical training in the athlete.



The Author Posed as "Hercules."

Photographed by Sarony, 1894.

You're Not Too Old

Every human being possesses at birth a susceptibility for the development of a certain degree of muscular strength and symmetry of form. lowed to grow up under perfect conditions—every muscle active—one will acquire this in all its perfection; but if a sedentary life is followed until past the growing age the attainable degree of muscular strength and beauty is not so great. However, those past this age should not despair. The susceptibility for development—though not so great as before—lies there dormant, and the influence of rational training will still increase the strength, size and symmetry of every muscle. Many instances have been noted where such individuals have doubled their strength in a few months of active training. And remember one does not merely gain increased muscular tissue, but there comes with this physical elevation, a buoyancy of spirits, a mental exaltation, an exhilaration of renewed youth—that make the mind clearer, the world brighter, and life really "worth the living."

The most glorious result of physical training is that it enables one to retain the vigor and energy of youth years beyond the usual time for showing age. Remember you are as old as you look, feel and act, and if your muscles and joints are kept supple, your brain clear and spirits buoyant, you will always feel young.



Classical Pose of the Author.

Photographed by Sarony, 1900.

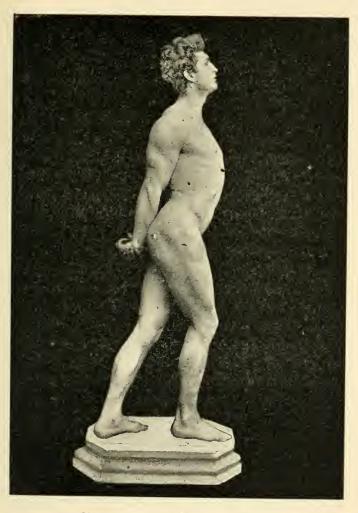
May Be You Haven't Time

"Our remedies oft in ourselves do lie that we ascribe to Heaven the fated sky."—All's Well.

One might as well say that he has no time to eat, to sleep. Health should be the first consideration of every one, and the means of acquiring and retaining it should always be at hand. How many of our brain workers, of our business and professional men, have sacrificed health, strength and happiness by following this rule, "haven't time to take care of health?" In exchange for this sacrifice, many, it is true, have accumulated wealth, but large fortunes are usually spent in vain endeavors to regain even a portion of their former physical vigor.

Stop, right now, before it is too late—take time to acquire vigorous health, or else you may be forced to "take time" to attend your own funeral, brought about prematurely by ten to thirty years from lack of muscular activity and other violations of the laws of health.

To sacrifice health and strength for riches and fame, is as bad as tearing out the foundation of a house to decorate a front wall.



Classical Pose of the Author.

Photographed by Sarony, 1900.

Physical Strength-Mental Power

"It is exercise alone that supports the spirits and keeps the mind in vigor."—Cicero.

Does not increased physical force, stronger digestive power, make the blood more pure, and does not improved blood make the brain clearer, and better in every way? I venture to assert that one can acquire his highest attainable degree of mental power only when he possesses great physical vigor. Physical stamina furnishes the nervous strength so absolutely essential to endure the difficult and persistent intellectual struggle conjoined to high mental development. We have a most remarkable exemplification of the truth of this in the Hon. Wm. E. Gladstone. Until nearly ninety years of age this wonderful man possessed undiminished the marvelous mental vigor of his carlier years, and much of this was due to the daily use of his private gymnasium, which, it is said, was fitted in his own home. Washington, Lincoln, Webster. and hundreds of other names could be mentioned which prove the dependence of brain upon muscular power.

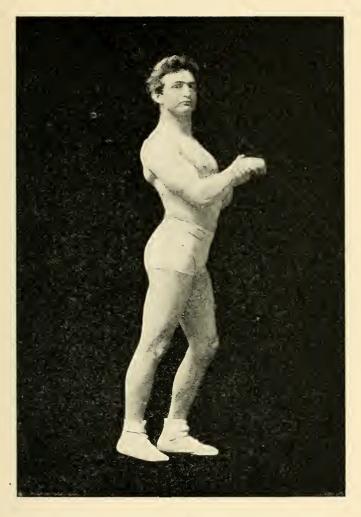


Classical Pose of the Author.

Muscular Exercise An Internal Bath.

Civilized society everywhere is more and more taking to the regular morning tub and shower bath. It is a disgrace not to have a clean skin. Yet exercise, the internal bath that brightens the eyes, clears the skin, cleanses the blood, strengthens and enlarges the muscles and drives the impurities from the whole internal system, is almost universally avoided. The surface of the body is bathed with water, the interior system is bathed with blood. Imagine one's condition when this blood is allowed to become sluggish and poisonous. Tumors, cancers and boils sometimes form; rheumatism, neuralgia, and, in fact, almost any disease, is liable to result. Now, what is proper exercise but an internal cleansing agent? Under its influence the heart with quick and strong pulsations forces the blood with increased power through the arteries and capillaries, drives the impurities out through the great purifying organs, and causes every organ of the body to feel rejuvenated and strengthened.

"By contraction of the muscles heat is developed from the oxidation of the tissues; a demana is made upon the blood for more oxygen. This is supplied by the lungs to the corpuscles of the blood, which carry it to the tissues in action, and take in exchange the burnt-up material, carbonic acid and other effete substances. Every organ of the body has thus been stimulated into healthy action by the movements of one set of muscles. The tissues then require more material; the blood, the medium of exchange, calls for an increased supply; the arteries open their flood gates to allow this increased amount to pass, by a stimulation of the nervous system which presides over this function—the heart supplies the force, the lungs and digestive track supply the material, and the kidneys and skin carry off the effete material."—David Orr Edson, M. D.



Classical Pose of the Author.

Photographed by Rockwood, 1900.

There is no real life without activity. Inactivity means death, wherever you find it. An engine, long unused, rusts away to ruin; muscles, long unused, become weak and flaccid, lacking in that element of life which gives health and harmony, grace and ease to every movement.

Those who have never enjoyed the exquisite pleasures of physical training, the delicious exuberant after-effects of a bath preceded by thirty minutes or an hour's thorough exercise, have missed the real pleasure of life. They have not only missed being in this exalted physical condition, but they have never possessed superabundant health, and without this high degree of health, life cannot be enjoyed in its utmost intensity.

The Greek Ideal.

The magnificent specimens of human physical life handed down to us in ancient Grecian sculpture, would leave the impression that Nature was more lavish in the dispensation of her favors at that time than she is to-day. Such is not the case. The development of a fine physique is governed by laws as accurate, as definitely fixed, as are the movements of the heavenly bodies. training was to the ancient Greeks what mental culture is to us of the present time. They were unintermittent and discriminating in their exercise and made their bodies strong and beautiful by giving to every part its natural and healthful use. They were not affected by crazes and relapses. In every human being of to-day there is a possibility for the development of just as much beauty, just as much health and strength, as there was in the days of the ancient Grecian athletes.

For the Young Man.

"Accuse not Nature; she has done her part.

Do thou but thine."—Millon.

The glorious possibilities of life are before you; your capacities, your energies, your power to take advantage of opportunities depend greatly on physical stamina—the steam that furnishes the force for the engineering mind to guide: the full realization of anticipated pleasures and successes is impossible unless this "power behind the throne" be equal to the efforts required. You have within reach health, success, happiness, strength of body and mind, and beauty of person-all there ready to develop under the magic effect of your efforts towards their acquirement. Do you want them? Are they worth the necessary endeavors? Is the reward a sufficient recompense? These are the questions that a young man should ask as he becomes initiated into manhood. But whatever your ambitions may be, whatever your conclusions may lead to, as you ponder on these questions, the unequivocal deduction that nothing of much importance can emanate from life without health, must confront you with unvarying steadfastness. And as you cultivate health you create comeliness of person; as the physical power within gradually increases until it swells, reverberates, thrills your entire being with the exaltation of superb physical life, every emotion, be it the fire of ambition or the tingling of an exquisite ecstasy, is intensified many times over.

If you are weak there is absolutely no excuse for your continuing so. You cultivate and strengthen your mind. Why not do likewise with the body? The mind is not any more tractable to cultivation than the body. For those just entering adult life physical training can change the entire structure and appearance of the body. It can improve, enlarge and make symmetrical every part of the physical organism.

Follow the system as herein illustrated. Begin moderately, and if you desire the greatest possible improvement in the shortest space of time, the exercise should last from thirty minutes to an hour daily. Thoroughly tire every set of muscles. If the resistance is too strong there is danger of becoming "muscle bound"—an inflexible condition of the muscles, incapacitating them for a quick graceful movement. Be persistent in your exercise and strong in your determination to reach the goal. Make it a pleasure instead of work. Look upon it as play. Study the movements of the muscles before a mirror as you exercise, and thus add to the interest. Study thoroughly your own physical condition. Be temperate and wholesome in habits and diet, cleanly in person and in morals. Above all, be a man-a real genuine, vigorous, courageous man. With a strong purpose towards the attainment of such an object, and with the mental environments and influences congenial and pure almost any young man can, by combining physical training with these ennobling forces, closely approximate the realization of this perfect manhood.

For the Middle-Aged Man.

"Anyone who devotes himself to intellectual pursuits must allow his body to have motion and practice gymnastics,"—*Plato*.

Man, that wondrous animal, so grand in intellect, so sublime in thought, so magnificent in his power, reaches his noblest, his highest perfection, both mentally and physically, in what we call middle-age. Then, in the full ripeness of his influence does he show the massive immensity of his capabilities. "Man was born to be a king, but he wallows in the mud," is a quotation that applies with startling distinctness in so many instances. In physical training, many, who have "wallowed in the mud" of violated health laws, will find a remedy that will make the penalties far less severe. To the "broken-down" in health no remedy has the permanent efficacy possesed by this natural means.

A man calls on his physical stamina for energy for the elementary power to achieve any desired object. At this time of life when so much depends on this physical strength, when plans of years are fast maturing, when opportunities appear for fulfilling life-long ambitions, the retaining of the greatest degree of physical excellence is of momentous importance, as success often depends largely on the clearness of mind, only made possible by the perfect performance of all physical functions.

Like the women at this stage of life, most men are either too fleshy or too thin, but nearly all possess sufficient strength to use the system as herein illustrated with but little variation, and, therefore, special instruction is not essential. Attention to dieting is necessary to a limited degree in either extreme, and the chapters on "Diet," "Reducing Weight" and "The Middle Aged Woman" can be read with profit. If you are strong your exercise can be made quite vigorous and can continue until a feeling of fatigue is present, though one should be careful not to overdo the work for the first few days. The exercises, using the muscles around the waist line-bending in different ways -should be given especial attention if you are a sufferer from digestive troubles, or if the abdominal measurement is too large.

Walking is of especial importance and should be often indulged in, and if the weight is to be reduced several miles should be traveled daily, after becoming inured to the work. Cycling is also an aid that is advantageous. but be careful not to ride to exhaustion. Read chapter on "Cycling" and remember that it is an exciting exercise and the tendency is to overdo it, thus producing injury instead of benefit.

For the Young Woman.

"When we breathe, exercise, eat, bathe and dress correctly, then our powers to grow healthy and beautiful, and to evolve higher qualities, become limitless."—Carrica Le Favre.

Do you worship at the shrine of Beauty? Now, while in the heyday of youth, while the rays of life's sunshine are warmest and brightest, do you not yearn for comely proportions, for a clear-tinted complexion, for the grace, suppleness and vigor of glorious, exhilarating health? If so, now is the time to determine, with a strong, inflexible will, that these marks of perfection shall be acquired. Now, while the body is still immature, still expanding and developing, your physical appearance can be changed in every outline, in every proportion. Remember that ugliness is a positive sin against Nature, and its possession indicates, beyoud all chance of refutation, that you have grossly disobeyed laws controlling the harmonious development of vigorous health.

To make possible "the life beautiful" the body as well as the mind and soul must be cultured and made symmetrical in every curve. Life, in its æsthetic sense, with all its subtle magnetic force, cannot be even partially realized by the mere act of existence. To exist is not to live. It is the abundant vitality of a cultured body that gives to every action, to every word, that forceful spontaneity, that ease of perfect confidence, so essential to the successful accomplishment of the projects of life. Within physical training a woman has a power for beautifying, not only her physical proportions, but

her eyes, her complexion, her very personality itself.

The movements as herein illustrated can be followed by every young woman, unless excessively weak—avoiding of course those recreative exercises that are not easily performed. It is especially essential in exercise for producing the smoothly rounded symmetry of beauty, without the more rugged outlines of strength, that the exercise never tend towards violence. Always commence moderately, and, above all, be persistent and regular in your endeavors. Walking and cycling are exercises that can be recommended. Regulate the distance according to your strength, and do not be afraid of becoming fatigued—it will soon pass away.

"Long brisk walks have a wonderfully beautifying effect upon the skin, as is proven by the brilliant complexions of the English women who walk constantly in all weather."—Eleanor Wainwright.

There is absolutely no need at any time for a corset after your figure has been developed to proper proportions, and it should be discarded entirely if you value health, strength, beauty, and, last, but not least, the power to hold the energy and attractions of youth far beyond the usual time for showing age.

"Girls kill the breath with corsets that squeeze the diagram. Girls can't run and holler like boys, because their diagram is squeezed too much."—Boy's Composition from "The Well Dressed Woman."

"Never exercise in a corset. * * * Always exercise in a perfectly free costume. * * * Practice before a mirror is valuable; it aids in gaining precision of movement, and the mind becomes interested through the medium of the eye."—Mabel Jenness.

For the Middle-Aged Woman.

"The fragile wall-flower with weakened flaccid muscles fades away in two or three seasons, while her more robust sisters mature slowly into ripened loveliness."

A woman at thirty-five should be at the very prime of life. At this age she should be more beautiful, more attractive, more magnetic, than at any time before. Such a woman, with experience and fully matured faculties, having followed the dictates of laws governing physical and mental elevation, should have strength of character and an all-persuasive personality. The frivolities of girl-hood are gone; having passed the various vicissitudes of life, unharmed, uncontaminated, her ripened experience gives a halo to her beauty, and creates in her associates a reverence of her actions and words.

The improvement that a woman can secure in her figure at this middle period of life by a little vigorous training is astonishing. A thorough training of the muscles will change her appearance for the better at this age as veritably as though she were another being. Youth has been allowed to slip away—not because the time had come for its disappearance, but because inactivity of the body brings on premature old age in every instance.

At this age a woman is usually too fleshy or else too thin—rarely is she satisfied with her proportions. If the object is to gain weight, read chapter on "Excessive Thinness;" if to decrease weight, read chapter on "Reducing Weight." When reducing drink sparingly of liquids at meal-time. Take long, fast walks with breathing exercises.

Practice drawing in the abdomen while walking, if waist measurement be large, as abdominal control is quite important, tending, as the muscles slowly develop, to drive away surplus tissue from that part of the body. Persistence in the work is an essential element to success in treating obesity, and once the weight is down to the proper standard but little exercise or attention to diet is needed to keep at the desired point.

If your proportions are satisfactory, and you merely desire to put more life into your movement, more spring and elasticity to your step, more dignity to your bearing and general appearance, and more symmetry and beauty to the outlines of your figure—the general directions can usually be followed, using, of course, an ordinary amount of discretion, necessary to the varying degrees of strength possessed by different women. The chapter referring to corsets should be read and digested. Many women will find it difficult to discard this device after having worn it all their life, but it can easily be done after the figure has been strengthened and shaped by muscular exercise. Never wear a corset when exercising, though, for awhile, if the muscles at the waist are excessively weak, it is advisable to wear a support of some character. you cannot discard the corset, at least adopt the corset waist, which, when laced tight, is certainly harmful in a small degree, though it does not interfere with the supple movement of the body at the waist line, and enables one to avoid all possibility of appearing like an immovable, inflexible figure.

As the Years Wane.

What can physical training do for those past the prime of life, for those with stiffening joints, with muscles fast losing elasticity and strength? There is within physical training no wonderful power of rejuvenation, for which Ponce De Leon so vainly searched in the swamps of Florida, but every part of the body can be made stronger and firmer, and every joint be made more supple, even if you are "well along" in years. The importance of using the body—the muscles of which it is composed—is almost as great in later life as in earlier years, if the energy and stamina that accompany vigorous health be desired.

Those of advanced years should avoid all heavy exercises. Perform the movements here illustrated slowly and use a very light machine. Work, when too vigorous, though it may stimulate and apparently be all right, is not ultimately beneficial at this time of life. Leave out those movements requiring a large amount of energy, though any one of them can be performed slowly with very little exertion. Exercise from five to ten minutes the first day, gradually increasing until it varies from fifteen to thirty minutes daily. Do not neglect walking and some attention to diet. Massage will be of great aid also, if an efficient operator can be found. Always take a sponge bath after each exercise, rubbing the skin thoroughly dry, then using the hands or a coarse towel for friction.

Our Boys and Girls.

If physical training is of such grave importance in adult life, of how much more importance is it for youth and maid developing into manhood and womanhood. The sculptor with his chisel and mallet moulds beautiful figures of his own imagination. Just so can children be moulded to suit individual ideas of perfection; just so can they be developed with mental powers ranging from the groveling idiot to the masterful specimen of majestic intellectuality, and with physiques from the skeleton resembling consumptive to the Apollo-like form of the modern athlete. Stop and think, mothers and fathers! Stop and ask if you are properly moulding the youthful human beings in your care. Many a boy has cursed his own father because of his failure to inform him of important physiological secrets. Many a girl can rightly blame her mother for her physical ugliness and ill health.

But little attention is usually given to the physical development of our girls. If they become beautiful women it is the merest accident. If their limbs and arms are unshapely and their forms ugly they grieve in secret and blame Divine Providence. They should rather blame their mothers or guardians. There is no excuse if girls do not grow handsome and healthy, for if allowed to follow natural instincts they will secure abundant fresh air and exercise.

[&]quot;The body of a growing girl should be as unrestricted as that of a growing boy."—Mabel Jenness.

But, as one very often hears, "It isn't lady-like for girls to romp and play or exercise—it's too rough." Now, if you wish your girls to develop into wall flowers with pale, delicate and sickly features, if you desire that their lives be a burden, if you would have attractive and intelligent young men shun them as if of another race, if you would have them endure the sickness, sorrow and misery that always accompany the lives of those without health or strength, forbid their running or playing in the sun; forbid all physical training, for they may grow strong, shapely and healthy. Are you afraid they will be considered hoydenish? Do you know that nearly all our most brilliant and beautiful women of to-day were, in their youth, designated as "tom-boys?" This running, playing and romping, this desire for physical training that won them the title of "tom-boy" was the secret of their beauty of form, their fine, clear, healthy skin, their suppleness and gracefulness, and their quick-witted, pleasing mentality.

These boys, so swiftly becoming men, deserve more attention, more care than they usually receive. Many grow up like weeds in a garden, forming a source of constant worry, being always in a scrape of some kind. They must have something to give vent to their surplus energies; they cannot sit down and remain quiet one moment. But is that a fault? No; not in the least. It is positive evidence of vigor and health. But my boy does not like much study, you say. Well, what right has a ten or twelve-year-old boy to be a bookworm?

Childish bookworms are never healthy, are never strong; they are a perversion of Nature. Give your boy "plenty of rope." Let him romp and play and train his muscles, and he will store up strength and health, and acquire a habit of exercise that will endure through life. Let him secure a strong, healthy and handsome body before attempting to train his mind.

"I believe that a good, healthy physique and the habit of excelling in some sport is not only the best preventative, but THE BEST CURE of those particular vices which are creeping into our colleges and even into the preparatory schools."—Dr. M. L. Holbrook.

Physical training can make every boy, every girl, handsome and healthy. Deformities and physical defects can always be partially remedied, and often entirely cured. Physical ugliness or weakness is unnatural and a sin against Nature, being caused by a lack of proper physical cultivation. The body can be strengthened easier than the intellect, and a boy or girl whose capital is a "sound mind in a sound body" is richer by far than one with a poor physique backed by millions; for happiness and success depend more on physical and mental than on financial possessions. Create a love in your boy for strength and manly beauty, and more will be gained toward a life of temperance than all the lectures in the world could accomplish.

Teach your daughters that cultivated health means physical beauty. It will do more for their future happiness than could the wealth of Crœsus.

Many boys and girls have become physical wrecks who might have grown into magnificent

manhood and womanhood had proper attention been given them at the right time.

"If you wish your boys and girls to grow handsome, strong and healthy, let them play; let them romp. Give them a chance in physical training to develop into glorious manhood and womanhood. Let Nature and the sunlight color them with the hue of health, and they will gladden your eyes at some future time with their commanding presence, their beautiful physiques, their powerful brains, their kindness of heart and their noble manhood and womanhood."—"The Athlete's Conquest."

Soreness Resulting from Exercise.

The best way to avoid stiffness of the muscles is to commence quite moderately, and immediately after a sponge bath, which should be preceded by exercise, rub and knead the muscles all over, applying alcohol in liberal quantities at the same time this is being done. However, even should you become a little sore, there is no need of worry. Apply alcohol in the manner described above, and continue the training after a rest of a day or two. It is unnecessary to wait until all soreness has passed away, as the movements, if started very slowly, will cause it to gradually disappear—but little remaining when through with the exercise and bath.

The Perfect Human Form.

The author purposely avoids giving a tabulated standard of measurements of the perfect man and From a standpoint of mere measurements that which constitutes perfect development varies as widely as does human characteristics. One person of a certain height may approximate to perfect development, while another of the same height may be as near perfection and still the measurements of the two persons would show striking dis-The muscular system has within similarities. itself a constantly active tendency toward perfection, when all hygienic rules are observed. every one of a certain height possessed a bony framework of similar proportions, a reliable standard of measurement of the perfect human form could easily be secured, but with this bony structure so widely differentiating, the size, contour and general appearance of the muscles which give life and beauty to this structure must vary in a corresponding degree. Therefore do not worry if the circumference of your muscles is not so great as that of some one whose development is to be envied, or of some list of supposed perfect measurements. Remember that there is within you this force constantly working toward the development of your own body to its highest attainable degree of perfection, if you exercise every muscle and live in strict conformity to Nature's beneficent laws.



Screw hook about six and one half feet from the floor in window or door sill. If wood is hard start hole with a gimlet. Screw it in deeply.



Now unwind cord of exerciser, and take wire quadrangle, to which the three pulleys are attached, and hang on this hook.



Then screw other hook into the floor from three to five inches from the wall as above. Fasten the lower attachment to this hook and



than you are ready to "strip" for the exercise.

General Directions.

Continue each exercise until the muscles used in that particular movement are slightly fatigued. After becoming inured to the exercise each one should be continued until thoroughly tired.

At first take the exercises in their regular order. Later you may deviate. The object is to use every muscle. The first twelve exercises do this, but the recreative exercises are given for variety and can be added with benefit if desired.

Those movements where special directions for breathing are given should be performed slowly.

Do not exercise until an hour or two after, or immediately before a meal. The best time for a busy man to exercise is on rising or just before retiring, though if time is no object the middle of the foremoon or the afternoon is preferable.

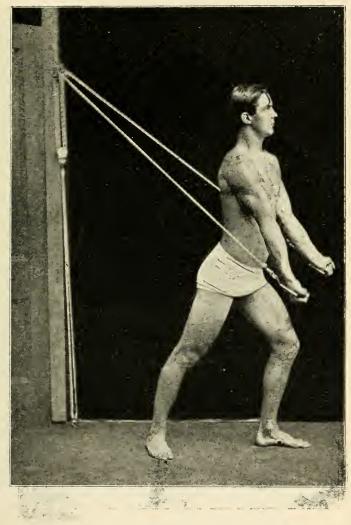
Your apparel must not interfere in the slightest degree with muscular movements—the less clothes the better.

The principal muscles brought into action by each exercise are mentioned in parenthesis.

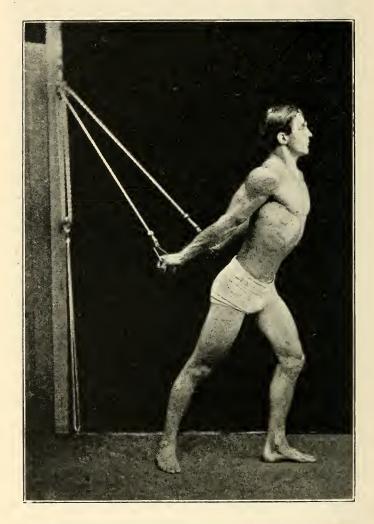
Pure air must be secured when exercising. See that your windows are open. Do not be afraid of catching cold.

This system of movements, though illustrated with an exerciser, can be taken with great benefit merely as free movements without the exerciser.

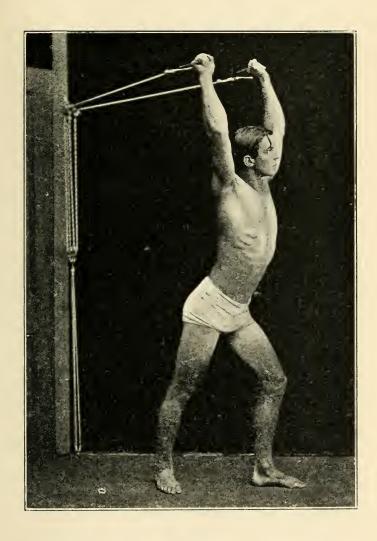
ALWAYS BREATHE THROUGH THE NOSE.



Exercise No. 1.—Circulatory Chest Expander. Inhale deep breath with arms as above; hold the breath and allow arms to go backwards and upwards to



this position: without pausing bring arms backwards and upwards



as above, then directly forward and downward to first position, expelling breath as arms descend. Pause a moment to inhale deep breath, then repeat.



Exercise No. 2.—With wrists bent inward bring arms outward and backward on a level with shoulders to



this position, bending wrists far back as arms reach the last of movement. (Muscles of the posterior forearm and of the back between shoulders.)



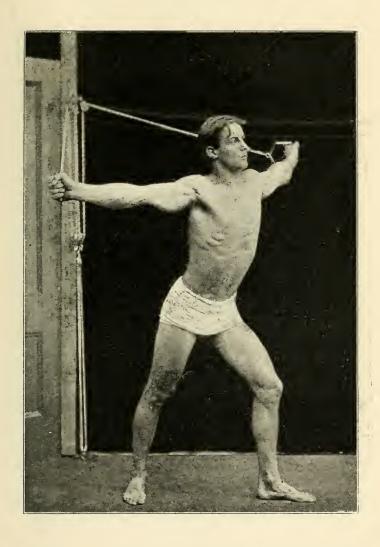
Exercise No. 3.—Strike straight forward



as above. (Muscles of posterior portion of upper arm and anterior portion of shoulder.)



Exercise No. 4.—With wrists bent inward allow arms to go outward and backward on a direct level with shoulders



as above, bending wrists backward as arms go back. (Muscles on anterior portion of upper chest and forearm).



Exercise No. 5.—Inhale full breath as arms come slowly downward and backward to



above position, expel breath as arms go back to first position. (For deepening the chest.)

The Bicycle.

The enormous interest now being manifested in this new recreative exercise deserves commendation and encouragement. The exhilarating effects of inovement conjoined with exercise in the open air, and the entire mental absorption so necessary in cycling, gives it advantages difficult to equal. Like walking, as an exercise it is not all-sufficient in itself. Although some use is made of the arms and the upper parts of the body, it amounts to but little when compared to the vigorous activity required of the legs. The abnormal position, incorrectly assumed, by many enthusiastic cyclists, together with the lack of healthful use of the muscles of the upper body, has produced in many cases a deformed condition. This can be corrected entirely by use of these muscles. Some means of exercising arms and chest are absolutely essential to cyclists desiring health, strength and symmetry for all parts of the body.

The habit of spurting or "scorching" is the greatest evil the cyclist contends with, and if wheeling is undertaken for pleasure and health it should be avoided. Many cyclists injure themselves permanently in this way, as the continuous nervous strain borne by the spurter is often beyond human recuperative power.



Loosen attachment from bottom hook, pull handles until lower pulleys touch the upper pulleys; take exerciser as above, detach from top hook, reverse and fasten the quadrangle to bottom hook, then fasten attachment to upper hook.



Exercise No. 6.—As hands go up to



this position bend wrists upward. (Muscles of the anterior portion of forearm and upper arm.)



Exercise No. 7.—Bring arms from above position outward away from machine



as above. When muscles tire, turn left side to machine—same exercise. (Muscles of the lateral portion of shoulders and lower portions of the breast.)



Exercise No. 8.—Keep elbows straight, bend knees as little as possible, and raise to



this position. (Muscles of the loins, of upper portions of the back and shoulders, and of inner posterior portions of the thighs and hips.)



Exercise No. 9.—Raise arms upward and backward to



this position. (The posterior portions of the upper arm and shoulder muscles. Exercise No. 5 also uses these muscles.)



Exercise No. 10.-Move shoulders up and down quickly.

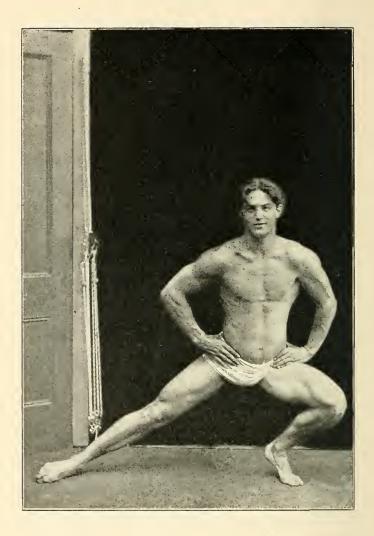
Variation.—Raise shoulders as high as you can slowly; flex muscles hard and try and raise them still higher.

Variation.—Raise on toes as high as you can the same time shoulders are raised. (Muscles of posterior calf and of the central portions of the shoulders).

Walking.

There is no outdoor exercise superior to walking, if made a pleasure. No intelligent athlete ever trains for a contest, no matter of what nature, in which walking is not a part of his daily exercise. It builds up vital strength, and when accompanied by the use of the upper parts of the muscular system, gives a power of endurance which cannot be acquired in any other way. Nothing can take the place of this as an exercise, and every system of training, if the highest degree of health and strength is desired, must include it.

When walking for exercise do not stroll. Walk swiftly, energetically, with the shoulders well back, abdomen drawn in. Divert the mind by companionship or interest in those passing; or, better still, seek the country, where Nature can charm you with infinite variety. Make a habit of drawing in full inspirations while walking, thus expanding the chest to its full capacity; hold the breath momentarily, and while flexing the muscles, throw back the shoulders with extra vigor.



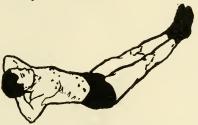
Exercise No. 11.—Starting with feet far apart bend to the right as above; straighten knee, then bend to the left. As you raise in this exercise make straight leg assist strongly.

the left. As you raise in this exercise make straight leg assist strongly.

Variation.—As you go to the right touch floor as far out to the right as you can with right hand—same with left hand. (Muscles of the sides, of posterior portions of the hips, and of inner and entire upper thighs.)



Exercise No. 12.—Recline on the back, hands on thighs. Keep feet on the floor and raise to a sitting position. If your feet raise from floor in spite of your efforts to contrary, place them under a bureau or anything heavy.



Variation.—Raise both feet from floor until limbs are in a vertical position. Grasp something heavy behind with the hands while performing this exercise if you desire. (Muscles of anterior portion of abdomen.)

Running.

If you are strong, slow running, with an occasional spurt, is a commendable exercise. It should continue after the first few trials until perspiration is induced, and should immediately precede your bath. If not strong, commence very moderately, gradually increasing the distance and speed as strength is gained.

S P E C I A L R E C R E A T I V E E X E R C I S E S

FOR DEVELOPING

MUSCLES AS USED IN

ATHLETIC SPORTS





Sparring.—Spring backward and forward, striking with right and left arms alternately. Imagine you have an opponent in front of you and "hit 'im hard." (Muscles of the legs, arms, shoulders, sides, back and abdomen.)



The Bicycling Muscles.



When one leg is tired change to the other. (Muscles of the calves, thighs and posterior portions of the hips.)



Putting the Shot.



To equalize development tire each arm with this exercise. (Muscles of the calves, thighs, arms, shoulders and sides.)



Rowing.



(Muscles of the back, forearm and upper arm.)



Throwing the Hammer.—Swing one or two handles as you desire round and round as you would a hammer then



turn as above for the final throw. Hold full breath during several circles for expanding chest. (Muscles of the breast, shoulders, back and legs.)



Lawn Tennis.—You can make the short stroke as in lawn tennis, or you can



give the arm a long swing upward as here illustrated. Change hands when one arm becomes tired. (Muscles of the shoulders, calves and breast.)



Fencing.



Change hands when one arm becomes tired. (Muscles of thighs, calves, upper arm, forearm, shoulders and sides.)



Throwing 56 lb. Weight.—This is the old style of throwing the weight, but



the exercise is splendid for training the muscles used in the new style. (Muscles of the anterior portion of the shoulders, of the loins and thighs.)

Athletics, or the Relation of Strength to Health.

Health is vital strength. No civilized being possesses it in the perfect state, for that would mean absolute freedom from pains, weakness and disease. Now, in what way is strength, or mere muscular power, related to health? These terms are understood to have a synonymous meaning; one cannot have health without strength, and vice versa, is the assertion made. Paradoxical as it may seem, one may for a time possess the enormous muscular power required to perform particular feats of strength and still be so deficient in vital strength that he enjoys no greater immunity from ordinary ailment than the average individual. Many living examples of the truth of this statement are seen in the athletic world of to-day. When an athlete can lift a great weight, run a short distance in very "fast time," and perform other wonderful feats, and this great strength is of no aid in resisting disease, he has followed an irrational system of training—he has followed methods which have resulted in a partial development, in strengthening only those parts used in training for contests. Though the development of the muscular system is absolutely essential to the enjoyment of the highest attainable degree of health and strength, the training methods as pursued in athletic and gymnastic institutions in many instances do not build vital strength, because of this partial use of the muscular system. Nature's most imperative law is that every function was made for use. "A chain is as strong as its weakest link;" the human body is as strong, vitally speaking, as its weakest part.

The ambition of the athletic enthusiast is to excel, and if any part of his body is finely developed he usually makes particular endeavors to improve that part still more, while his defective muscles are allowed to lie inactive. The result of all this is a "one-sided" development—finely developed arms with small, unshapely limbs, and vice versa. This is in no instance a permanent gain from a health standpoint. The neglect of any portion of the body lessens to a certain degree the attainable development of those parts where the greatest endeavors are being made for improvement. Each and every part becomes stronger and more finely developed in consequence of this use of the entire muscular system.

"Don't neglect the body" is the cry of the the thletic enthusiasts, and the same individuals usually commit a like error by neglecting that portion of the body which affect the vital system most strongly—the muscles around and near the waist line. Even in finely developed athletes the abdominal muscles, lateral and anterior, are usually noticeably deficient. The importance of strengthening this part of the muscular organism cannot be over-estimated, as one can build no great degree of vital strength if the necessity for use of these parts be ignored. These muscles surround and infold the organs from which every human func-

tion secures its motive power, and those who seek vital strength should see that they receive special attention. When one remembers that this part of the muscular organism of the average woman is in a state bordering paralysis from tight lacing, the proverbial feminine weakness should cease to excite wonder.

Strength is very closely related to health, and when cultivated in every part of the muscular system raises the standard of health proportionately with the increase of strength. One who has thoroughly trained all his muscles should hold his youthful looks and the buoyancy and fire of youth from twenty to thirty years longer because of this added strength.

That strength does not in all cases mean health should be borne in mind. The athlete who is able to lift a thousand pounds and in the end succumbs to consumption, has followed a method that failed to strengthen weak parts. One who can acquire fine strength in any one part of the body, can usually by persistent practice develop other parts of the organism to the same degree of perfection. In this system of training every part of the muscular organism is brought into thorough action, and ultimately, by persistence, into thorough development.

Women—Beauty.

"The human form, in its perfection, is the most exquisite of divine creations. * * * Physical beauty consists in symmetry, vital vigor and brilliant coloring. * * * Disease is ugliness; health, beauty."—Annie Jenness Miller.

Beauty of woman—chanted in poetry and song; the halo that has glorified the novel; the theme that has intensely interested the living in all ages, in all climes and in all degrees of circumstances, is, if calmly dissected, almost entirely physical. From whence come the bright eyes, the lips carmined with the rich blood of health, the cleartinted cheeks, the supple gracefulness, the symmetrical outlines of a beauteous form—swaying the minds of men and at times the destinies of nations? There is not a sign denoting beauty which has not either its origin or its influencing power in the physical side of life. Where would the society belle be if her ever-ready witticisms were not accompanied by the changeful fire of a sparkling eye? —that sure sign of a good digestion. Of what charm are well-molded features when not conjoined to a certain power of expression, created by the confidence of effervescing health as much as by the guiding intellectuality? Without this feeling of physical exaltation, this innate something that stirs the pride, dignifies and makes sublime the mien, beauty loses its grand power and its most alluring element of expression. What is grace but the muscular strength that gives one perfect command of the body? What is suppleness but ease

of movement?—that yielding pliancy that betrays harmonious and unrestricted development. Health is the very foundation of all beauty—grand or simple.

"In its largest sense health implies harmonious development of body, mind and soul, that trinity in unity that is symbolized in nearly all religions. A soulless or undeveloped beauty lacks the crowning grace of loveliness."

When health is gone, beauty slowly disappears. Beauty indicates the possession of a harmonious physical organism. It is not a gift; it is created by harmonious environments and proper habits of life, and when there is deviation from these this priceless desideratum slowly wastes away. There are women who at first seem beautiful, but acquaintance quickly dispels the illusion; others appear commonplace, but as you come to know them, an expression, ever changeful, has an allurement, a charm that beautifies every outline of the features, and as such a countenance breaks into a smile its wondrous magnetism is fully betrayed. This alluring, magnetic force, though guided and strengthened by proper mental influences, springs from the exhilaration of abundant physical health. If it were possible for a woman to be as beautiful as a goddess, without this physical magnetism, this power to charm and control others, such a creature would be but a nonentity after all. ity, lifelessness, does not come in the same category with beauty.

All women cannot be beautiful—though the majority can—but every one can be graceful and pleasing to look upon if she cares to take the

trouble to develop every part of her physical self. No woman has the slightest excuse for being without that physical comeliness which follows the cultivation of abundant health. Magnetism, that wondrous power, being mostly physical, can be vastly increased by this cultivation of the physical forces.

Every word of instruction within this book applies equally to either sex.

Very weak women should consult a physician versed in the benefits of physical training, before attempting the exercises. All should be careful not to make the exercise too vigorous. The goal should ever be kept in view. Many young women waste their lives longing for something, they know not what, when the brightening, strengthening, wholesome, beauty-developing influence of physical culture would "take them out of themselves" and develop animate beings endowed with life, with ambition, with vigor, with clearness of mind and beauty of person, and above all, with a magnetism as transfiguring as the sunlight when it appears and dissipates the gloom of a cloudy day.

Diet.

The old saying, "What is one man's meat is another man's poison," is not literally true, but there is a grain of truth in the statement; for,



dietetically, each individual should be a law unto himself.

If every one possessed the same physique, the same idiosyncrasies, the same mental power and peculiarities, and lived under conditions exactly similar, a diet

could be prescribed in quantity, quality and material that would be productive of the best results in every case. Unfortunately for physical wellbeing—though fortunately for the development of that mentality, that genius which heralds all reform and all progress—environments in the lives of no two persons are exactly alike. Therefore, each one should study himself and depend on those foods which appear to be best suited for his needs. There are, however, a few fundamental laws by which all can be guided, and the suggestions made here are of that nature. But whatever you adopt as a diet, avoid crankiness. Do not think because of your discovery of one or two dietetic secrets, that all who fail to believe and eat as you do are fools. They may think the same of you.

The horror of dieting is all dissipated when the very first principle of rational dietetics is known to be the thorough enjoyment of food—eating with appetite.

"Eat what you like best" is a maxim that can always be followed with benefit if the appetite be normal, for the normal appetite craves mostly that food which supplies best the nutritive elements needed to recuperate and feed the system.

As the writer, on one occasion, came near to filling a premature grave as the result of a fanatical dietetic experiment, he advises that a liberal degree of caution and much study should accompany all radical changes in diet. "A little knowledge is often a dangerous thing;" so do not be rash; feel your way step by step.

There are food products now in the conventional American's regular diet which do not deserve the name of food. They are not only sadly deficient in nutriment, but the meagre supply they do contain cannot be extracted by the digestive organs without an effort far greater than should be required. In this list can be enumerated many fancy and complicated dishes, such as rich pastries, highly seasoned dishes, rich gravies and all foods made exclusively from fine, white flour.

The American "staff of life" is a delusion and a humbug. The diet of no civilized nation is in a more perverted condition than in America to-day. Our "staff of life," with the brain and muscle-feeding elements all extracted with the bran, is the principal part of the average diet, and yet many,

with a presumption born of ignorance, wonder at their deficiency in strength of body and clearness of mind. Remember that something cannot be constructed of nothing, and that a food containing no muscle and brain-feeding elements cannot be expected to supply the waste of muscle and brain. Wheat, taken whole, contains all the needed constituents, but the bran and shorts, the most important food elements, are extracted and fed to cattle. As a result, the cattle grow stronger and the men weaker. "He who feeds fat cattle should himself be fat," if there is any merit in observation. Nearly every physiology teaches that white bread contains but little nutriment, is hard to digest and the direct cause of many weaknesses. Therefore, eat whole wheat bread instead of white; make your cook use whole wheat flour in the kitchen. and avoid hot breads, unless made of this flour, if you value health. Hot biscuits cause thousands of women to suffer from regularly intermittent sick headaches, for which they blame their "weak constitutions" and "highly nervous organizations."

Eat two or three meals per day (the author usually eats only two daily, that having been his habit for several years) as your taste or occupation requires.

Eat slowly; masticate thoroughly, and one of the principal parts of digestion—the thorough mixing of the food with the saliva—will be fulfilled. The fine, delicate flavor of a delicious food element is secured only after the food is thus thoroughly masticated. Do not drink while food

is in the mouth, as the liquid moistens the food and prevents the saliva from performing its office. Never eat when nervous or excited. Avoid eating immediately after violent exercise and do not exercise until digestion is well started (see chapter "Exercise—Digestion"). Do not eat unless hungry. The "sauce" we call hunger not only causes the food to be more thoroughly enjoyed, but the work of digestion is much more perfect—the saliva flows more freely, the gastric juices of the stomach exude more copiously, etc. By hunger I do not mean a ravenous desire for food, but merely its thorough enjoyment. There are many who rarely become hungry, but who eat with what is called a "coming appetite." When food cannot be enjoyed at one meal, a feasible plan is to wait until the next, and the reward will be an excellentappetite. Many of the ailments that afflict humanity are induced by overfeeding-by this false theory that one "must eat three meals per day to keep alive." When the system becomes overloaded with corrupt matter which the purifying organs are unable to eliminate, the average individual, instead of giving these eliminating organs a chance to void these surplus substances, continues to feed the unwilling stomach, and consequently adds just that much to the corrupt condition of the already overloaded organism. The writer remembers quite distinctly an instance in his own life when partial abstinence from food for a short time saved him from what apparently promised to be a very severe case of pneumonia. At the time he was eating

three hearty meals a day and exercising occasionally when convenient. He first noticed a soreness about the chest, and thinking it of little consequence, tried to effect a cure by bringing about profuse perspiration with vigorous exercise-running, etc.; but the soreness grew worse, and in a day or two was so severe that a slight movement, such as coughing, would be accompanied by a sharp, piercing pain. This pain soon became excruciatingly unbearable, and as other symptoms appeared it was plain that pneumonia was threatened. After realizing the gravity of the occasion he abstained totally from food for twenty-four hours, drinking copiously of water, both hot and cold. The second day there was a slight improvement, and he drank one glass of milk; the third day there was a marked difference for the better, and a little solid food was taken with two glasses of milk, divided into two meals; the fourth day the soreness had almost entirely disappeared, and inside of a week the patient was as well and hearty as ever, and strange as it may seem to many, during the entire time in which almost total abstinence from food was required, no desire for food was present, thus proving most conclusively that the organism did not need food while endeavoring to eliminate accumulated corruption. Had the writer adopted the usual methods in his case, forcing the appetite, etc., his life would have been endangered, and the best that could have been expected would have been a month or two in bed, as is usual in this disease.

"That deep-rooted superstition which Dr. Holmes called the 'idea that sick people must be fed on poison,' has caused more injury than the combined natural causes of disease."—Felix L. Oswald A. M., M. D.

Vegetarianism—Meat Diet—Strictly Raw Diet.

"Concentrated foods are not necessary for sedentary people, and sooner or later exhaust the digestive powers."—T. Powell, M. D., Sec. Amer. Health Sc. Ass.

There are occasions when an abstentious diet of almost any character is of immense advantage, but the feasibility of making such a diet permanent is undoubtedly questionable. When one adopts a vegetarian diet, and does not exclude milk and eggs, and is living at home, or in an institution where a large variety of vegetarian dishes can be secured, cooked in the most palatable manner, no great objection can be made to this system of diet; but to attempt it with little knowledge or preparation for obtaining the great variety of foods that can be prepared from grains, fruits, vegetables, and nuts, is sheer folly, and can have but one result—ultimate physical deterioration. Meat is unquestionably a highly stimulating article of diet, and when one following a sedentary occupation consumes large quantities, disease is sure in time to appear. If one's occupation requires a large degree of muscular exercise, such a diet will probably cause no noticeable harm, still a diet of a more mixed character would certainly be far

superior. Though a high degree of uninterrupted health may be enjoyed while following a rational vegetarian diet, a strictly meat diet, as advocated by a few theorists, cannot, in my opinion, be of benefit. When the system is suffering from overfeeding, almost any diet which tends to restrict the amount of food consumed, will usually be beneficial, though, if long continued and unnatural, the ultimate effects will be disastrous. I have tried upon my own person nearly every system of diet which has attracted attention, with the exception of a meat diet, and the beneficial results that have accompanied total abstinence from meat, for a time, when a low diet seemed essential, together with the apparent utter irrationality of the theory, made it appear as unworthy of an experiment.

"We should recognize that our earth abounds with wholesome and nutritious products of the vegetable kingdom, from the tropics to the polar limits of arboreal vegetation, and total abstinence from flesh-food would promote the cause of moral as well as of physical health."—Felix L. Oswald, A. M., M. D., author of "Physical Education."

The strictly raw diet sounds very well in theory. The wild animals subsist on it and are always healthy and strong, etc., etc. It must be remembered, however, that the wild animals live mostly in the open air, are tremendously active muscularly, and that their stomachs have for generations been accustomed to this rugged diet. If a change from cooked to raw foods, grains, fruits, vegetables and nuts could be made and strictly adhered to for a generation, we might gain thereby, though such an

assertion is open to question; but if one suddenly adopts this unusual diet and expects to receive immediate and permanent improvement, he will usually be most grievously disappointed. The gastric juices, to penetrate and disorganize such a food element as raw grain, must be several times the strength of the fluid used for digestion in the human stomach, and if one expects to assimilate such foods to advantage, it will require a training of years and may be generations to so change the stomach as to enable it to thoroughly accomplish this task.

Exercise—Digestion.

A short stroll enjoyed leisurely, or any pleasurable, light occupation is of decided benefit immediately after eating, though exercises requiring much



energy, either mental or physical, should be strictly avoided. The time that should intervene between a hearty meal and vigorous exercise varies widely in different individuals and in the same person under different stages of health and degrees of dietetic indulgences. The best digestive barometer is

your own feelings, though one should hardly attempt vigorous work within less than one hour after a hearty meal, and with many persons two, or even three hours should elapse.

Violent exercise should also be avoided immediately before eating, as the blood is then withdrawn from the stomach to the muscular system, and consequently the digestive organ is not so well prepared for the reception of food as when the circulation is more equalized.

A meal that would be "hearty" for one might be considered slow starvation by another. The quantity of food required to sustain health is largely a matter of habit. The assimilative power of some individuals is very great, all the nutritive elements of consumed foods being absorbed and used by the system; others eat large quantities and retain so little of the elements that feed bone, muscle and brain, that they "seem to get no strength from what they eat." This troubledefective assimilation—is in nearly every case induced by overfeeding together with muscular inactivity. One following a sedentary life easily falls a victim to Epicurean habits, and in many instances a torpid condition of the system is engendered conjoined with an abnormal capacity for food, the constant indulgence in which ultimately weakens the entire digestive and assimilative system. The remedy for this condition is the cleansing, re-vitalizing, strengthening effects of physical training, combined with a plain, substantial diet; though there are many instances of cures being effected by training alone, with but little attention to diet.

Breathing Exercises.

Myriads of wonderful (?) secrets referring to methods of breathing have been unfolded to the interested public by members of various professions—physical and vocal culture, elocution, etc., etc., and some of these theories are so wildly theoretical as to actually conflict with nature. No doubt this is an age of marvelous enlightenment, but when one attempts to foist upon others a conception of this important function at variance with Nature, his egotism has carried him a step too far.

What is a method of breathing? Has any one interested in the subject stopped to ask? Is it a particular movement of the abdomen walls, or of the diaphragm? Or maybe it consists of a peculiar manner of inhaling or exhaling, or of a certain lift of the shoulders or chest walls while breathing. It is marvelous how a jumble of words can humbug us!

Man, with the intelligent use of natural hygienic means, may often aid Nature in the performance of her functions; but never, on any occasion, has he improved on her methods. Granting that Nature's methods are perfect, the proper mode of breathing can then be found in a little child, as yet unhampered by tight bands or constrictive clothing. But one might study this perfect method until gray-headed without acquiring any more knowledge of breathing than the graduate of a nautical school acquires of his adopted

calling who "had never been near the water." There is but one way to learn a proper method of breathing and that is to breathe deeply and often. Acquire a habit of taking full inspirations—always breathe through the nose—while in the open air; do not wear constrictive clothing; always keep the body in correct erect position—more especially so when inhaling full breaths. Practice the breathing exercise described in the chapter on "Walking." Make your muscular exercises vigorous enough to induce active respiration. Inhale and exhale slowly or quickly, as you desire, though a variation is probably preferable. You may occasionally "liold your breath" for a few seconds after an inspiration. Remember that the lungs were not made for bellows, but to purify the blood, and that an excessive amount of these exercises, when long continued and not induced by muscular exertion, will so expand the lung tissues that a harmful collapse may result when the exercises cease to be a habit.

The Air We Breathe.

"The repeated inspiration of the same air is the cause of scrofula."—Dr. Baudeloque, an eminent French physician.

One of the greatest evils to civilized humanity is the breathing of foul air. How many times have my readers heard, "The damp night air does not agree with my weak constitution." Such an

[&]quot;To breathe impure air, or an insufficient amount, is far more hurtful than an insufficient amount of food, sleep, rest, cleanliness or sunshine."

individual is afraid of the night air, and the windows of his sleeping room are kept tightly closed all night for fear a little of the night air will creep in and cause a cold, malaria, or something of that kind. He falls asleep. He breathes the same air over and over again; it becomes more polluted, more poisonous every hour, every minute. The carbonic acid gas, said to be the most poisonous gas known, exhaled from the lungs of every living being, becomes thicker and thicker. Ah, he does not wish to breathe the night air; it might give him malaria; but he breathes instead the air from which the oxygen has been mostly extracted, the air which has brought thousands upon thousands to consumptive graves, which has dulled the brain of every living being, from the child at school to the president in his council chamber, and which in time will clog the system with poisonous blood. In what condition is the air of this sleeper's room after being tightly closed all night? It is reeking with carbonic acid gas; its foulness is diseasebreeding in the extreme. In a great many instances the sleeper awakes with his head so clogged with catarrhal discharges that he can hardly breathe. He feels dull and drowsy, not active and strong, as he should feel after a night's rest.

The consumptive will very often agree when it is stated that the best means of curing consumption is to "rough it;" live in a tent, sleep under a wagon, or something of the like. But wherein

[&]quot;Impure air is a cause of consumption." -Dr. Dio Lewis.

lies the virtue of such a remedy? Is it the discomforts of such a life that produce the benefit? Not by any means; it is the fresh air you breathe, and the exercise you take. Use your muscles and keep your windows open at home; ventilate your rooms so thoroughly that they will contain as much oxygen in proportion as the outside air. Never sit or sleep in a room imperfectly ventilated, and you will be benefited as much as if "roughing it," and probably more, because all the advantages are secured without suffering the discomforts.

Some argue as a reason for tightly closing their windows that the outside air is not pure; but is this so-called foul air purified by closing the windows and saturating it with exhalations of carbonic acid gas? Does not the air become more and more poisonous the longer enclosed?

Restrictive Dress-Corsets, Belts, etc.

"The corset curse among women is more insidious than the drink curse among men. * * * Lay aside the corset. Do you feel the need of its support? Do you feel like falling to pieces? Then your corsets were too tight, and the muscles are atrophied from disuse." Helen Gilbert Ecob in "The Well Dressed Woman."

Belts, corsets, or any article of dress worn so tight as to interfere in the slightest degree with the circulation has an injurious effect. The pressure of a tight fitting hat interferes with the circulation nourishing the scalp, and often assists in causing baldness. A tight fitting shoe not only produces corns, bunions, etc., but assists in causing cold

feet, by producing defective circulation in these extremities. But the particular evil which can not be too severely condemned is the wearing of corsets. After having been worn until far past the growing age, and when the tendency is toward fleshiness, a support of some kind (corset waist or the like) will usually be necessary when desirous of being presentable, but if not too fleshy, or in early adult life, any woman can so strengthen and beautify her figure that the corset is absolutely unnecessary, even when desirous of appearing conventional. On endeavoring to discard the corset, the first and the several succeeding trials will usually be accompanied by a feeling as though "you were going to fall to pieces." This will soon pass away as the weakened muscles of the waist gradually acquire the strength they should possess. But maybe you don't lace tightly? You merely wear the article to give shape to the form. Well, if you change your form one iota from what Nature intended, harmful results are liable to ensue. If following the laws that require the use of every muscle, Nature will shape the body with the symmetry and exquisite outline that no human device could ever create. A woman who has worn a corset all her life must make the change slowly if she desires to discard it, and in no instance is it advisable to do so unless the muscles of that part of the body, giving grace and suppleness to every movement, be strengthened and beautified by physical training. It should be remembered that the use of this device not only destroys that exquisite pliancy of movement, tha

suppleness so essential to grace and harmony, but it also partially and sometimes entirely paralyzes the muscles around the waist line, squeezing them into a shapeless mass of flesh. These muscles, when strong and regularly used, assist the assimilative and digestive functions in no small degree. Thus the corset tends to weaken digestive power. It also presses down the internal organs and causes displacements and female complaints, and the support it forms for the breasts while worn renders the muscles useless which are supposed to hold them in position, and because of the weakness of these muscles, the breasts of a well-rounded woman, when without a corset, fall to an unnatural position, causing her to look unshapely. Nature needs no aids to create her outlines but that which comes from conforming to her beneficent laws.

Reducing Weight.

"Fat is often an accumulation of waste matter which the vital powers are unable to eliminate: no proof exists that it ever again serves as a food—the hibernating bear and the starving man both void it, and in cases of shipwreck there is no evidence that obese people survive their more angular brethren."

The only perfectly natural means, free from all danger, for removing surplus fatty tissue is an in-

telligent system of physical training. Occasionally, to accomplish the desired object with rapidity, dieting is necessary—and by dieting I do not mean starving. In this case it merely consists of avoiding those foods which are almost entirely fattening. Many athletic teachers in attempting to reduce weight make the ex-



ercises so difficult as to induce excessive perspiration—"sweating it off." This is often a sure means of cure, but is very laborious and sometimes dangerous, and to be permanently successful, requires continuous application.

The question is often asked, how can physical training reduce an obese person and add flesh to an angular one? At first this seems paradoxical, but as one understands the power of physical training to produce the highest attainable degree of health and strength, the paradox disappears. The satyr

in the fable refused to believe in the traveler who "blew hot and cold," warming his frost-bitten fingers and cooling his steaming porridge by the same process. Modern skeptics refuse to see that the explanation of cure by exercise is similar, namely, the equalizing of extreme conditions.

An emaciated condition is unnatural and a positive indication that the organs of the body are not all in perfect working order; a surplus accumulation of flesh is equally unnatural and indicates with equal distinctness that the human functions are not being performed harmoniously. Now, if physical training always tends towards the development of the highest degree of health and strength, if under its influence every function performs its office more thoroughly, and every organ is accelerated in its efforts to produce the purest, strongest bodily condition—is not the riddle, how it can deposit flesh on a thin person and lessen the weight of an obese one, fully solved.

A thorough development of all parts of the muscular system tends to drive away surplus accumulations of flesh. The ability to "get fat" is a sign of health, and only when allowed by inactivity to accumulate superabundantly, does this surplus tissue cause a diseased condition. The great advantage of physical training over all other remedies for this trouble lies principally in the fine increase in strength that always accompanies the decrease of weight, and in the symmetry and beauty of form acquired by those with the courage and energy to persevere in this natural method. Walk-

ing is also an excellent exercise to combine with the system herein described. If the waist measurement is excessively large, all bending movements should be practiced more than others. Do not be too ambitious at the start. Gradually increase the distance and the speed of your walks. Exercise only five or ten minutes the first day, adding five minutes each day, as you become more hardened to the work.

Excessive Thinness.

Almost any one can acquire enough flesh to present a pleasing appearance. There is no excuse for being excessively thin; the fault can be remedied, in every case, to a certain extent. Of course a thin person, inheriting that character of physique, cannot develop immense muscles, but he can add muscular tissue and speedily cultivate right proportions, thus securing symmetrical and pleasing outlines. One can be slight in build and still be beautifully proportioned.

If you desire more flesh, take abundant exercise, starting quite moderately. Use the system here illustrated daily. Beside this, take long walks in the pure air at a brisk speed; make liberal use of the breathing exercise mentioned in the chapter on "Walking." Try to be content; do not worry. Never eat without an appetite. Many keep themselves thin by continually overloading the stomach, and the sole change to a more moderate diet will often cause more tissue to be deposited.

Eat wholesome, nutritious foods. Avoid pastries. If you have no appetite for substantial foods, wait until you have. Do not make the mistake of eating largely of fattening foods—they will only cause digestive disorders. Remember that, first of all, muscle is needed, and as the muscle increases, the fatty tissue, rounding off to beautiful outlines this muscular frame, will gradually be deposited in greater quantities. After becoming thoroughly accustomed to the work every exercise should be continued until the muscles used are thoroughly fatigued.

Mental Influence.

The influence of mind over matter, the power of the imagination to sway the physical forces for good or evil, though known to many, is rarely appreciated fully. Disease is often induced merely by the weakness resulting from the fear of its appearance, and a sufferer from digestive troubles, in many instances, becomes a victim because of a wrongly strict supervision of diet conjoined with the ever-present fear that "he has eaten something that won't agree with him." Dieting is all right if rational; care in avoiding unwholesome or innutritious foods is commendable when influenced by actual knowledge instead of fanatically biassed conclusions.

If the influence of mind over body assumes such proportions as to actually produce disease, the great importance of a normal and cheerful mental state must be thoroughly appreciated. By no means can this condition be so fully realized as through the wholesome, life-giving influence of rational physical training. The blues disappear almost immediately under its effects. The inclination towards melancholy is abnormal, to a great extent induced by physical causes, and the accelerated circulation and respiration resulting from vigorous exercise dispels these morbid tendencies more effectively than any other possible means.

This influence of mind over body must be remembered with equal emphasis in the endeavors toward acquiring physical power and beauty. A strong will which determines that health and strength shall, at any cost, be acquired, goes far towards making success more certain. Faith in one's own powers to reach any desired end is of the utmost importance, no matter what the goal may be, and in attempting to acquire physical perfection it applies with equal distinctness. "Be sure" in your own mind "you're right, then go ahead."

Alcoholics.

There are instances in human life when a choice is given between two evils. For example, when one has been tossing and tumbling for hours with insomnia, the nervous strain of this enforced wakefulness often causes more physical harm than could an opiate; and the more serious illustration of a man bitten by a rattlesnake gives an exempli-

fication of a choice between the injurious poison of alcohol and the deadly poison of the rattler. The intensity of modern civilization develops unnatural conditions, which can often be partially obviated by remedies injurious in themselves, but not to the extent of the perverse conditions to be met.

As a remedy for counteracting the effects of evils more immediately destructive in their results, alcoholic liquors may, on rare occasions, be useful (though the writer has never found them so); but as a part of one's daily diet, or as a stimulant to be relied on for energy in the routine of daily life, they have a destructive power that saps the vitality and destroys the noblest part of man. This fermented poison is so obnoxious to the internal system, that as it enters the stomach the action of every organ is accelerated to eliminate it. holics, even when indulged to a moderate degree, have a weakening effect, ultimately, on the entire physical organism. They stimulate, and often, for a time, give one more immediate strength, but real vital strength, which carries with it the power of endurance, is greatly lessened. This desire for a stimulant is an unnatural appetite, caused in all cases by an abnormal or weakened condition, and will disappear under the beneficial effects of physical training, accompanied by a wholesome diet. The most ignorant athlete knows enough to avoid alcoholic liquors while training for an important event, as the object of his work—the acquirement of the highest degree of health and strengthwould be defeated.

Bathing.

The skin is covered with thousands upon thousands of little pores from which exude impurities carried to the surface by the blood. If these pores are allowed to become clogged because of uncleanliness, disease may result. Two or three times per week, one should take a warm bath, preferably after exercise, thoroughly rubbing and kneading the flesh with soap and water, thus removing every particle of dirt from the skin. Once or twice daily take a cold sponge bath, merely wetting the skin, after which rub thoroughly with a coarse towel. This stimulates the pores and improves the healthful performance of their functions. Rubber flesh brushes are useful in rubbing the skin, though the hands can be made to do good service. Many spells of indisposition can be turned aside by following the rules of proper bathing.

Care of the Teeth.

The immutable laws of Nature demand the use of every organic function; the human teeth are not exempt, and to the soft, mushy foods, now so largely consumed by civilized humanity, is largely due the universal prevalence of decayed teeth—or else the entire loss of teeth. When the diet consists mostly of foods made from white flour, the teeth decay from starvation, or, in other words, the phosphates, food element of which the teeth are

principally composed, are almost entirely extracted in the bran. The teeth, to be free from decay, must be exercised, must be furnished with constituents essential to their preservation. Besides furnishing the teeth with exercise and the necessary nutriment, they should be brushed after every meal. If bothered with tartar dip the brush in precipitated chalk before using. If the gums are tender, rub them daily with strong solution of salt and water, after which spend about ten minutes pressing the upper gums downward against the teeth, and the lower gums vice versa. This will accomplish more as a hardening process than any other possible means, and improved gums means better teeth. Of course the general health has much to do with the condition of the teeth, but perfect care, even with opposing influences, will usually preserve them

Care of the Hair.

The prevailing ignorance of both physician and layman in reference to the hygienic care of the hair, is astounding. The scalp, like any other part of the cuticle, should be kept clean. The sebaceous glands are continually voiding an oily substance, which, if not washed away, causes particles of the scarf skin to adhere to the surface, thus closing the pores, the normal action of which is absolutely essential to a healthy condition of the scalp and hair. When in health the scalp should be thoroughly cleansed with a vegetable oil soap

—weak alkali—at least twice a week. Green soap which can be procured at any drug store is good. A stiff bristle brush should be used daily when hair is dry to loosen the particles of dandruff and as a stimulating friction. Sun and air the hair all you can. If troubled with excessive dandruff, cleanse scalp with soap three or four times per week; daily use the stiff bristle brush when hair is dry; on the day before shampooing, anoint the hair and scalp well with pure olive oil. This softens the particles and they come off more easily.

Baldness, when not of too long standing, and thinning hair, can in many cases be remedied by hygienic means. The cause in some instances is constitutional, and requires a change of habits, or the avoidance of those conditions which induced the trouble. The treatment of diseased conditions of the scalp is quite complicated, and cannot be entered into here. Those especially interested in this subject are advised to read "Macfadden's New Hair Culture."

Insomnia.

If a human being ever has an honorable and just right to commit suicide it is when tortured with the dread complaint insomnia. In this condition one can toss and tumble, fret and fume, and apparently pass through ten or even twenty days of genuine misery in a single night. Notwithstanding the evidence to the contrary, this ailment is easily curable. It is caused in nearly every instance by an uninterrupted nervous strain. The

primary cause may be mental or physical, but in no case will proper physical training fail to be beneficial. Only an abnormal condition of the strongest kind could bring about such results. The normal performance of the bodily functions requires, occasionally at least, a vigorous use of the muscular frame; and in this ailment the desired results often show signs of appearing almost immediately, though to effect a complete cure requires considerable time.

Close attention in regard to bathing is especially essential, and a bath, either sponge or tub, should, if possible, always follow the exercise, which should be taken immediately before retiring, while the body is nude.

Sun Baths.

The exposure of the entire surface of the body to the direct rays of the sun is especially beneficial to both weak and strong. Care must be taken not to continue the baths too long at the first few trials as a sun-burned condition may be engendered, which is far from being pleasant. This means as a tonic to the system cannot be recommended too highly. The bath should be taken daily at any time, morning or afternoon, and should last from fifteen minutes to an hour.

"Every man is a fool or his own physician at thirty."-Tacitus.

It takes more vitality to be sick than to be well; or, in other words, if strong enough to be alive un-

der the abnormal condition of sickness, you possess far more strength than is needed to be healthy.

Physical Training as a Treatment of Disease.

"The wise for cure on exercise depend."—Dryden.

Physicians are now turning from the Materia Medica to Nature for their treatment of many diseases, and in rational physical training they have found a remedy of incalculable value. The vitalizing, upbuilding effects of this use of the entire muscular system, is, in some diseases, the most powerful of all hygienic instrumentalities.

"At the present time investigation is abundantly carried on in the pathological, physiological and therapeutical aspects of medicine, but the hygienic side is somewhat neglected. For hundreds of ardent questioners of Nature who are laboring with the microscope in the biological and bacteriological laboratories, those who attack disease from its causative side may be counted on the fingers of one hand."— Dr. Stone.

Usually disease is simply a means of eliminating accumulated poison, and the presence of these foreign or surplus substances in the blood is caused in nearly every case by muscular inactivity or unhygienic habits of life; therefore, weakness and sickness are not only unnatural, but avoidable as well. A diseased condition is mostly the result of the victim's ignorance or carelessness. The common cold so much dreaded, is the most simple means of avoiding surplus accumulation of poison, which might clog the system and cause more serious disease if allowed to remain. When the body is thus loaded with impurities which the organs of excrement are unable to eliminate, only a

slight exposure is necessary to cause a cold, which indeed often results without even this occasion. In other instances these impurities may be eliminated by means of a feverish headache, or this process may be accompanied by any one of the numerous ailments with which humanity is afflicted. All this pain and suffering is Nature's great warning. It is a penalty exacted from her law-breakers. Sufferers cry out in distress and blame Divine Providence for their almost unbearable misery, seemingly unconscious that they are paying the price for indiscretions knowingly or unknowingly committed.

"Certain diseases are called filth diseases, as diphtheria, typhus, typhoid fevers, etc., but nearly all physical troubles, aside from those due to accident, are filth diseases, and by cleansing of the body through elimination a cure is reached. Every one must know that the healing, curing power resides within the organism, and that it is ever alert to overcome the effects of errors in our treatment. For example, what is erroneously but popularly termed 'a slight cold' has a run of a few days and then completely terminates without the patient having done the least thing to help the cure. It often happens that the system is so foul, and the symptoms so aggravated, that the 'cold' is said to be 'a bad cold,' and still the victim may, through inability to yield to his feeling of need for rest and treatment, con tinue his usual work, and the disorder, after a period of feverishness, headache, nose-running, sore throat, etc., begins to disappear, and in a couple or three weeks he is 'cured.' It is thus clearly shown, and no further proof could be desired, that the organism succeeded in such cases in doctoring itself and in curing a very serious disorder. The full significance of this is, that no matter what the disease may be, the symptoms-pain, inflammation, general fever, etc. - are indicative of the process of restoration."—Chas. E. Page, M. D.

Special Instructions in Treating Diseased Conditions.

"A sick man is a rascal." -E merson.

Before attempting self-treatment, the wise

course is to secure the advice of a physician, or a medical gymnast, well versed in physical exercises and their effects. But whatever course is pursued, great care must be used to avoid straining or overworking the muscles. For a chronic, bedridden invalid much beneficial exercise can be obtained by the mere act of rolling from one side to another, and by lifting and swinging the arms around in every conceivable direction. As strength is gained an exerciser can be hung where convenient to the invalid's chair or bed, and be pulled in different directions, the idea being to bring all the muscles into slight action. Do not make work of it at first. Try to play with the handles as a child plays with his toys, for in strength one is a child while in this condition, and you should try to "play yourself" back to health again. You may laugh, but just try it as an experiment. Be careful in your first attempts to allow no one near who will deride your efforts. Nothing is so discouraging as being "made fun of"—all the benefits are lost under such circumstances even if continued. Breathing exercises are of great aid to an invalid of this character, and should be added to the movements you might desire to use. Draw in deep inspirations, exhaling slowly. Although the air in an invalid's room should always be thoroughly cleansed by ventilation, still an especial effort must be made to secure undoubtedly pure air while exercising.

[&]quot;Dr. Newman says, 'The Chinese used mechanical breath-taking as a remedy for many diseases,' It is stated that the people of India,

1300 B. C., practiced full, deep breathing several times daily as a healing art."

"Caelus, Galen and other Greek and Roman physicians recommended full, deep breathing several times daily for a cure of disease."

If able to attend to the ordinary duties of life, though suffering from a disease, the symptoms of which are of intermittent or continuous character, the exercises as here illustrated can be taken slowly in their regular order without an exerciser or with one of light strength, omitting all movements that require any great degree of exertion. The maxim, "Know thyself," applies with strong emphasis to all sufferers of this character, and the vast stock of good literature, both hygienic and otherwise, explaining in detail the innumerable diseases, their causes, etc., from which civilized beings suffer, is easily and cheaply obtained. The best aid your physician could possibly have would be the absolute faith acquired in his methods by thus satisfying yourself as to the rationality of his treatment. Exercise is only a part of the treatment: congenial environments; proper habits as to diet, bathing, clothing, etc., etc., have much to do towards effecting a cure. Perseverance is an element absolutely essential to the accomplishment of any object in life, and it is especially required if you expect beneficial results from exercise and other hygienic remedies. If any part of the body is weaker than another, it should be given particular attention—that is, exercises affecting that part should be practiced more than other movements. Never go beyond your strength. To bring on a

feeling of fatigue is not otherwise than beneficial if it disappears a short time after the exercise, but if this feeling continues the work has been overdone and care should be taken to avoid repeating the error.

Make strennous endeavors towards a cheerful, happy frame of mind. The power of mental dissatisfaction to influence evil results is well known to all. It should be distinctly borne in mind that your disease is the result (there are rare exceptions to this rule) of years of unnatural habits in life, and that, in order to recuperate and strengthen a broken-down constitution, considerable time is required to show even a small improvement.

Digestive Disorders

. If some means could be devised for obviating the effects of digestive ailments, over half the diseases from which civilized beings suffer would be relegated to the past. Properly adopted physical training will in all cases be of great value. Dyspepsia and all chronic disorders of the digestive functions can be cured by this means. In the treatment of these ailments especial attention must be given to those movements that strengthen the muscles surrounding the great vital organs. The exercise of these muscles not only causes more or less motion of the vital organs themselves, but strengthens the affected organs—a more healthful action of the heart and lungs and the entire digestive system is created, making the blood purer and richer in vital building elements. Exercise

No. 12 will be found especially valuable. Particular attention should be given to regular bathing. After bath and exercise, slap the muscles over the stomach and along the abdomen for five or ten minutes, making the blows strong without causing pain. An improvement will be noticed in a short time if persistent in the treatment.

Weakness of the Lungs.

"Consumption is incurable by medicines I admit; that it is often cured by pure air, exercise, right habits, no intelligent and candid physician will doubt."—Dr. Dio Lewis.

That weak lungs can be made strong again with a rational system of physical training, is too well known to require verification. My own case is only one instance from thousands of such cures. Especial attention to breathing exercises is desirable in the treatment of this complaint, though the entire muscular and vital system must be strengthened. Plain, wholesome food and an unlimited quantity of fresh air are necessary to produce results. Long walks at a good speed, with the breathing exercise mentioned in chapter on "Walking," should be added to the regular system of movements with machine. The sleeping room should be well ventilated when in health or disease, but pure air is especially essential in this trouble, and particular care should be taken to procure it. Thousands annually die of this disease from the one cause of breathing over and over again the air impregnated with poison exhaled from the lungs. Read chapter on "The Air We Breathe."

How Physical Training Purifies the Blood.

It accelerates respiration and heart action, opening all the pores which void the impure and effete matter carried to the surface by the quickened circulation. The blood becomes impure when the organs of elimination—the great purifiers of the body—are unable to thoroughly perform their functions. Physical training makes every part of the vast depurating system more active in the performance of its duty. The greatly accelerated circulation carries the surplus impurities to these cleansing organs, which perform their functions more effectively under these conditions. Rational physical training is a marvelous cleansing agent, is a purification of the whole internal system, and this cleansing process becomes absolutely essential at times, if desirous of being free from the occasional periods of sickness that afflict the average human being.

General Debility.

Those of a nervous disposition, with a tendency to mental worry, usually fall victims to this disease. Inactivity of the muscular system greatly aggravates the evil, and in many instances is the sole cause of this annoying trouble. This system of exercises, combined with proper diet, plenty of fresh air and congenial mental environments, will effect a complete cure in nearly every case. Mental control is well worth cultivating in this trouble as often the cause is largely of a mental nature.

Deformities.



Thousands are to-day suffering from annoying and sometimes unsightly physical defects, which can be partially remedied in nearly every case, and in many instances permanently cured by proper correcting exercises. Curvature of the spine, round or stooping shoulders, flat chests, large abdomens, wry necks, difference in the height of shoulders, is only a small list of deformed conditions amenable to this treatment. Of course self-treatment

of these troubles is usually impossible, but the services of physicians who use and understand this natural means of cure can easily be secured.

Paralysis.

Muscular exercise in a disease like partial paralysis is of incalculable value and will often effect a permanent cure when all other methods fail. The use of electricity is merely a poor substitute for this means, as it causes the muscles to flex without the assistance of nerve or will force, thus strengthening them without building up the controlling power. The advice and assistance of a physician or expert in medical gymnastics is necessary in treating this disease. The weakened and

wasted muscles must be kneaded, rubbed and exercised until thoroughly tired daily. If the parts treated have entirely lost voluntary control, passive movements should be given. Care must be taken to use every muscle, not only those of the affected parts, but also all near-by muscles.

Massage.

A commendable remedial agent can be found in massage for the treatment of chronic diseases and for increasing the pleasures and benefits of physical training. After exercise and a sponge bath, the manipulations of a skilled operator causes one to feel as though the entire body had been cleansed and rejuvenated.

For poor circulation, massage, in connection with physical training, is a marvelous remedy, and will cure the most obstinate cases in a short time. It is a costly luxury, but those who can afford it will feel amply repaid for the expenditure. The Electric Massage Exerciser can be recommended for this purpose.

Backache.

Pains in the back, from which so many suffer, can in nearly all cases be relieved in a few minutes and permanently cured by exercises affecting those muscles. Exercise No. 8 can be specially recommended with "all-around" work for general upbuilding.

An epitomized sketch of my struggle for the goal of physical excellence may enthuse those cast down by seemingly unconquerable weakness. When physical culture as a means of building vigorous health first attracted my attention, all hope of ever possessing a vigorous body had disappeared, and in my wildest dreams the possibility of acquiring the strength of an athlete never occurred to me. Remedies of every kind were tried. Every atom of faith in the efficacy of drugs soon disappeared. While noting the physical superiority of the lower animals over humanity, I concluded that their strength must be due to the perfectly natural conditions under which they lived. They are natural foods, breathed pure air, and used every part of their muscular organism. With thoughts busy in this strain, an opportunity presented itself to visit a gymnasium. The muscular strength and vigor displayed by nearly every one exercising there confirmed the conclusion already formed, and I determined to try the efficacy of this natural remedy in my own case.

My start was rather crude, but after two weeks of persistent work, a very slight improvement was noted, and thus abundantly encouraged, I persevered with renewed vigor. In about two months my hollow cheeks began to fill out, my thin arms to assume a rounded appearance. As I noted all these results a great joy took possession of methe joy of a possibility of health and strength. Those who have never lost that priceless element of human life cannot realize the enormous value it

assumes. My one object in life after this was the acquirement of vigorous health, and like every enthusiast, I often made mistakes, and would have secured in a few months the improvement that really required years, had I, at that time, possessed the knowledge accumulated since.

Addendum.

The author has purposely avoided technical terms and phrases. Too often these have been used for mere display of learning, or as a cloak for covering ignorance, and the object of the author is not to confuse and awe his readers (even were he possessed of such a power), but to draw them near, to cause them to feel that he was at one time a sufferer, and that he has been through the struggle from disease to health, that many may contemplate. making. Though the life of no civilized being is free from unhappiness, still the author believes that within the benevolent laws controlling birth, growth, decay, regeneration and death, there is an all-wise influence which, if understood and intelligently employed, will mitigate many evils, alleviate and cure many pangs, and bring life, health and gladsomeness to many poor victims of disease. He has illustrated in a most striking manner the results derived from following his own theories, and he can only say to his reader "Go thou and do likewise."

Bernarr A. Macfadden,
New York City.

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